

## Chapter 1. Purpose and Methods

### 1.1 Purpose

This study explores the opinions of adult residents of the state of Michigan toward Michigan Department of Transportation (MDOT), the state of transportation in Michigan, and the preference for change in transportation policy. The recommendations in this report are intended to provide the public voice for MDOT's long-range transportation planning.

### 1.2 Interviewing

Professional interviewers, working from a central, monitored location, between February 21 and 28, 2006, interviewed a random sample of 1100 adult Michigan residents. The average interview was 12 minutes long. Potential respondents were contacted through random digit dialing (RDD). Attempts were made each night to reach people who were not at home the previous night, before moving on to new telephone numbers. This emphasis on callback improves accuracy by including hard-to-reach respondents. The participation rate (completed interviews over the total number of completed, refused, and terminated interviews) was 51%.

### 1.3 Quotas, Oversampling, and Weighting

We divided the state into the seven MDOT regions (see **Figure 1** below). In order to get enough interviews in each of these regions, we set a quota and oversampled the less populated regions. All regions had between 100 and 300 randomly drawn interviews. Data was then weighted proportionally based on the size of the adult population determined in the 2000 Census and estimated growth from the 2004 Census estimates (see **Table 1** for actual and weighted sample size).

**Table 1. Sample and Population Breakdown by Region**

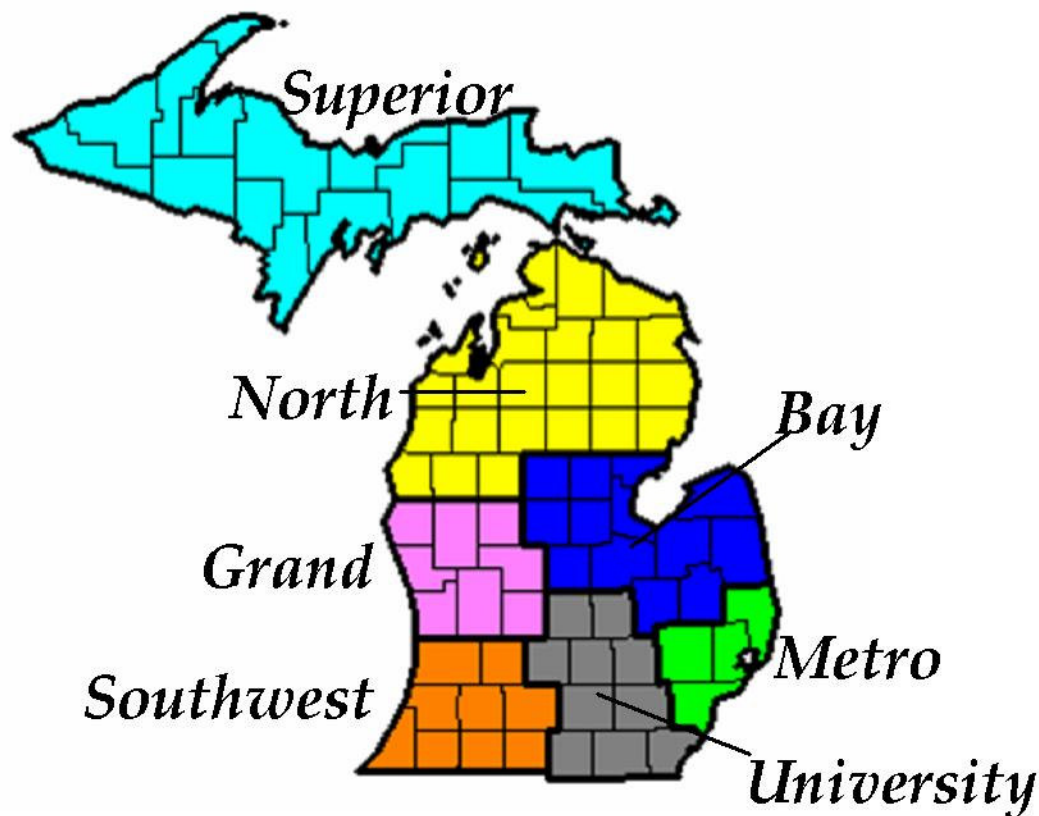
Regions	Adult Population	Actual Sample Size	Weighted Sample Size
Metro	42%	300	458
University	15%	150	166
Southwest	9%	150	103
Bay	13%	150	138
Grand	12%	150	134
North	6%	100	65
Superior	3%	100	36

Quotas were also set for gender to match the known proportion of men and women in the adult population within each region. After the data was collected, we also weighted the data by age to match the known proportion within each region's adult population.

## 1.4 Margin of Error

The margin of error at the 95% confidence level is about +2.95% for a sample of 1100. However, due to the geographic oversampling, a true margin of random error for the entire sample is closer to +3.7%. The margin of error is larger for subgroups, depending on

Figure 1. MDOT Regions



subgroup size. (See Volume Two for a more detailed explanation of sampling and the margin of error.)

## 1.5 Figures and Tables

Figures are integrated into the text. Top-line results can be found in the Appendix of this report. Banners or cross-tabulated tables can be found in the second volume of this report.